



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/547,443	11/07/2005	Marysusan Couturier	L3799-01(02)	1200
33250	7590	03/17/2009		
W. R. GRACE & CO.-CONN ATTENTION: PATENT DEPARTMENT 62 WHITTMORE AVENUE CAMBRIDGE, MA 02140			EXAMINER OJURONGBE, OLATUNDE S	
			ART UNIT	PAPER NUMBER
			1796	
			MAIL DATE	DELIVERY MODE
			03/17/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/547,443
Filing Date: November 07, 2005
Appellant(s): COUTURIER, MARYSUSAN

Stephan P. Williams
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 02/26/2009 appealing from the Office action mailed 09/15/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Knight et al (EP 0129309);

Burdock, G., Encyclopedia of Food and Color Additives, 1999, CRC Press,
vol.III, page 2246-2247 (Oxidized Polyethylene);

White (US 5,955,163);

Akao et al (EP 0569950);

F.H. Winslow, New Protectants for Polyethylene, 1958, Bell Laboratories,
Volume 36, Number 9, Pages 319-322.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 22-28 and 33, are rejected under 35 U.S.C. 102(b) as being anticipated by Knight et al (EP 0129309) as evidenced by Burdock, G. (Oxidized Polyethylene Wax).

Regarding claims 22 and 33, Knight et al teaches a sealing gasket on the inner surface of a closure for a container (page 1, lines 1-2) that comprises:

- thermoplastic polymeric material, exemplifying a wide range of thermoplastic polymers including polyethylene, polypropylene, polyvinyl chloride and mixtures of these polymers (page 6, line 26-page 7, line 7), this serves as polymer component A of the instant claim; 0 to 30% of a wax, and exemplifies polyethylene wax (page 7, lines 30);
- 0.1 to 10% of slip aid, said slip aid preferably is a blend of silicone oil and fatty amide in the proportions by weight 1:0.5 to 1:2, the fatty amide being for instance stearamide (page 9, lines 7-13).

Knight et al further exemplifies the silicone oil as a 60,000 cS polysiloxane (page 10, lines 10-11). A silicone oil with a viscosity of 60,000 cS has an average molecular weight of about 94,000.

When the polyethylene wax, the silicone oil and fatty amide ,are all present in the composition of Knight et al, as exemplified in Example 2 (page 10, line 28- page 11, line

12), the silicone oil serves as the lubricant and the combination of polyethylene wax and fatty amide serves as the slip aid of the instant claim respectively.

Though Knight et al does not explicitly teach the composition comprising a slip aid comprising a saturated amide having an iodine value no greater than 5 in accordance with ASTM D2075-92, the examiner notes that the iodine value of an amide is an inherent property of the amide.

Though Knight et al does not teach the composition comprising a slip aid comprising an oxidized polyethylene, it is known in the art as evidenced by Burdock, that polyethylene undergoes oxidation in air to produce oxidized polyethylene; hence, the polyethylene wax of Knight et al inherently undergoes oxidation to produce oxidized polyethylene wax.

Regarding claim 23, Knight et al teaches all the claim limitations as set forth above; Knight teaches stearamide as an example of the fatty amide of the invention (page 9, lines 10-11).

Regarding claim 24, Knight et al teaches all the claim limitations as set forth above and exemplifies the composition comprising 80 parts of ethylene vinyl acetate and 4.05 parts of polyethylene (EXAMPLE 2, page 10, lines 29-32). The mixture of ethylene vinyl acetate and polyethylene serves as polymer component (A) and the amount of ethylene vinyl acetate in the mixture is 95 parts based on 100 parts of the polymer component (A).

Regarding claim 25, Knight et al teaches all the claim limitations as set forth above and further teaches the composition containing polyethylene (page 8, lines 4-5).

Regarding claim 26, Knight et al teaches all the claim limitations as set forth above and further teaches that the thermoplastic polymeric material may be selected from a wide range of thermoplastic polymers including copolymers of ethylene propylene (page 6, lines 26-30). Copolymer of polyethylene and polypropylene is a copolymer of ethylene propylene.

Regarding claim 27, Knight et al teaches all the claim limitations as set forth above and further teaches that the thermoplastic polymeric material may be selected from a wide range of thermoplastic polymers including copolymers of ethylene propylene (page 6, lines 26-30) and that the preferred polymers are one or more ethylene vinyl acetate copolymers optionally blended with a polyalkylene (page 7, lines 4-6). A copolymer of ethylene propylene is a polyalkylene.

Regarding claim 28, Knight et al teaches all the claim limitations as set forth above and further teaches the thermoplastic polymeric material may be selected from thermoplastic polymers including polyvinyl chloride (page 6, lines 26-29).

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knight et al (EP 0129309) as evidenced by Burdock, G. (Oxidized Polyethylene Wax), in view of White (US 5,955,163).

Regarding claim 29, Knight et al teaches all the claim limitations as set forth above and further exemplifies the composition comprising polyethylene (see Example 2, page 10, lines 29-33). Knight et al does not teach the closure wherein said polymer component comprises polyethylene, polypropylene or a mixture thereof and further comprises styrene-ethylene butylene-styrene block copolymer.

White teaches a crown cap having a gasket formed of a thermoplastic material characterised in that the thermoplastic material comprises a hydrogenated copolymer of styrene and conjugated diene or a functionalised derivative thereof (co1.3, lines 29-34). White further teaches that gaskets formed from the incorporation of the hydrogenated styrene-diene copolymer have among other properties extremely good sealing properties and high temperature resistance (co1.3, line 64-co1.4, line 24).

White further teaches that the hydrogenated styrene-diene copolymer is preferably a block copolymer and that suitable copolymers include styrene ethylene butylene styrene block copolymer (co1.4, lines 31-37).

Since both inventions of Knight et al and White are in the same field of endeavor (cap liners), one of ordinary skill in the art would have incorporated styrene ethylene propylene styrene block copolymer as taught by White into the composition of Knight et al in order to have a composition with, amongst other properties, an extremely good sealing properties.

Claims 30-32 and 34, are rejected under 35 U.S.C. 103(a) as being unpatentable over Knight et al (EP 0129309) as evidenced by Burdock, G. (Oxidized Polyethylene Wax) as applied to claim 22 above, in view of Akao et al (EP 0569950).

Regarding claim 30, Knight et al teaches all the claim limitations as set forth above. Knight et al does not teach the closure wherein said saturated amide is behenamide. Akao et al teaches a similar composition comprising crystalline resin (page 3, line 36- page 4, line 28) and lubricant that includes fatty acid amide (page 4, line 41). Akao et al further teaches behenic acid amide and stearic acid amide as functional equivalents (page 4, lines 45-46); since the composition of Akao et al is similar to that of Knight et al one of ordinary skill in the art would have substituted the stearamide of the invention of Knight et al with behenic acid amide as taught by Akao et al by routine experimentation. Behenic acid amide and stearic acid amide are behenamide and stearamide respectively.

Regarding claims 31, 32 and 34, Knight et al teaches all the claim limitations as set forth above. Knight et al does not teach the closure wherein said organopolysiloxane is polydimethylsiloxane.

Akao et al further teaches the composition comprising dimethylpolysiloxanes silicone lubricants (page 5, line 26); since both compositions of Akao et al and Knight et al are similar, one of ordinary skill in the art would have used dimethylpolysiloxanes as the silicone oil of knight et al.

(10) Response to Argument

The response to the applicant's argument according to each of the applicant's heading for the argument is as follows:

Errors in the Asserted Rejections

The applicant argues that Knight does not teach a composition that is free of unsaturated amide, and that includes an oxidized polyethylene in combination with an organopolysiloxane and a saturated amide. The examiner disagrees.

Firstly, the present claim 22 claims "A closure for a food or beverage container, wherein the closure includes a sealant liner molded from a composition comprising (A) a polymer component, which is essentially free of erucamide and other unsaturated amide...." and the examiner notes that the transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention and that for the purposes of searching for and applying prior art under 35.U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising." Moreover, as stated in prior office action and reiterated above, Knight teaches a composition comprising slip aid and a wax (page 2, lines 27-35); said slip aid is preferably a blend of silicone oil and fatty amide, an example of said fatty amide is stearamide (page 9, lines 7-13) and the wax is exemplified as polyethylene wax (page 10, lines 29-35). As evidenced by Burdock, the polyethylene wax of Knight inherently undergoes oxidation in the presence of air to produce oxidized polyethylene wax. The

oxidized polyethylene wax serves as the oxidized polyethylene of the present claim.

Silicone oil is an organopolysiloxane.

Hence, Knight teaches the composition of the present application and the prior rejection is proper.

The Rejection Under 35 U.S.C 102(b)

The applicant argues that with respect to the anticipation rejection, the examiner has attempted to select specific elements within the disclosure of Knight and to combine those elements in a particular way to arrive at the claimed invention. The examiner disagrees.

Knight teaches a sealing gasket comprising thermoplastic polymeric material, wax and slip aid (page 2, lines 27-35), and elucidates the components of the composition of the invention (page 6, line 26-page 7, line 7), (page 7, lines 29-32) and (page 9, lines 7-13).

Knight further teaches that the slip aid is preferably a blend of silicone oil and fatty amide, an example of which is stearamide (page 9, lines 7-13) and further provides polyethylene wax as a specific example of the wax (page 7, lines 29-32 and page 10, lines 31-32).

As stated above, the polyethylene wax of Knight inherently undergoes oxidation in air and silicone oil is an organopolysiloxane.

The applicant further reproduces a table showing a side-by-side comparison of the sealant liner composition used in the claimed closure and the composition exemplified in the last paragraph of Knight Example 2, and states that this is knight composition closest to the sealant liner composition utilized in the claimed closure. The applicant

further argues that as can be seen, the only specific Knight composition that is closest to the claimed invention differs therefrom in three important respects and that it should be clear that this example does not anticipate the claimed composition, nor do any other examples in Knight. The examiner disagrees.

The disclosure of Knight is not limited to exemplified embodiments, rather, it encompasses every embodiment of the disclosure, and Knight anticipates the composition of the present claims as stated in prior office action and reiterated above.

The applicant further argues that while Knight generally teaches that stearamide, a saturated amide, may be employed as a fatty amide, Knight does not disclose the specific combination of stearamide with organopolysiloxane and oxidized polyethylene as claimed. Thus although Knight includes a saturated amide in a list of potential materials that may be employed, this general disclosure is not an anticipatory express disclosure of the specific combination as claimed. To anticipate, one must have identity in disclosure, not just a possibility based on suggestion. Moreover, since Knight has only exemplified an unsaturated amide (oleamide) in the examples, these examples clearly do not anticipate the claimed invention. In fact, the use of oleamide (an unsaturated amide) in the examples teaches away from the present invention, which specifies that the composition must be essentially free of unsaturated amide. The examiner disagrees.

As stated above, Knight teaches a sealing gasket comprising wax and slip aid (page 2, lines 27-35). Knight further teaches that the slip aid is preferably a blend of silicone oil and fatty amide, an example of which is stearamide (page 9, lines 7-13) and further

provides polyethylene wax as a specific example of the wax (page 7, lines 29-32 and page 10, lines 31-32). The polyethylene wax of Knight inherently undergoes oxidation in air and silicone oil is an organopolysiloxane.

The examiner further notes that the claimed composition of the present application is disclosed by Knight with sufficient specificity to constitute an anticipation under the statute (see page 2, lines 27-34, page 9, lines 7-13, page 10, lines 29-33 and page 11, lines 8-10).

The applicant further argues that with respect to the inherency position, first, it is well-known that commercially available polyethylenes typically include thermal stabilizers or antioxidants and that while the examiner has referred to Winslow, a 1958 article, for recognition that polyethylene oxidizes, the examiner has ignored Winslow's teaching that antioxidant compounds may be added to polyethylene to counteract the oxidation. Thus, Winslow essentially confirms what has become the present day common usage of antioxidants in polyethylene resin. The examiner disagrees.

Nowhere in the disclosure does Knight teach that the polyethylene wax of the invention is a commercially acquired polyethylene wax having thermal stabilizers or antioxidants incorporated therein, or that the polyethylene wax contains thermal stabilizers or antioxidants.

The applicant further argues that more importantly, all the Knight examples include a thermal stabilizer as an additive. This stabilizer is included to prevent oxidation of the components included in the Knight compositions. Thus, the polyethylene wax would not form oxidized polyethylene, because thermal stabilizer present in the composition would

inhibit oxidation. The examiner's oxidation hypothesis is simply contrary to the available evidence and cannot support a theory of anticipation absent a clear and unambiguous teaching in the art. The examiner disagrees.

As stated above, the disclosure of Knight is not limited to exemplified embodiments, rather, it encompasses every embodiment of the disclosure; Knight anticipates the composition of the present claims as stated above. Furthermore, the antioxidants of the composition of the invention of Knight are one of the minor components which may be included in the composition (page 9, lines 14-20). The minor components are optional. The applicant further argues that the federal circuit has provided clear guidelines for establishing inherency and that clearly, the examiner has not established beyond mere possibility or conjecture, that the Knight compositions necessarily include oxidized polyethylene and that this would be recognized by persons of ordinary skill.

Accordingly, Knight does not anticipate the claimed invention because Knight does not disclose a composition that includes oxidized polyethylene. In addition, Knight does not anticipate because Knight does not disclose a specific composition that includes a saturated amide, free of unsaturated amide, in combination with a silicone and oxidized polyethylene. The examiner disagrees.

As stated above, the polyethylene wax of the composition of Knight inherently undergoes oxidation in air and the claimed composition of the present application is disclosed by Knight with sufficient specificity to constitute an anticipation under the statute (see page 2, lines 27-34, page 9, lines 7-13, page 10, lines 29-33 and page 11, lines 8-10).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/OLATUNDE S OJURONGBE/

Conferees:

/Randy Gulakowski/

Supervisory Patent Examiner, Art Unit 1796

/Christopher A. Fiorilla/

Chris Fiorilla

Supervisory Patent Examiner, Art Unit 1700